

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

THE ROCKEFELLER UNIVERSITY, a
New York not-for-profit corporation,

Plaintiff,

v.

LIGAND PHARMACEUTICALS
INCORPORATED, a Delaware corporation,

Defendant.

Case No. 08 cv 2755 KPC-HP

**REPLY AFFIRMATION IN FURTHER
SUPPORT OF DEFENDANT'S
MOTION TO DISMISS UNDER FRCP
12(B)(2) OR, IN THE ALTERNATIVE,
FRCP 12(B)(3)**

SIMON MILLER, under penalties of perjury, affirms and says:

1. I am a Shareholder in the law firm of Greenberg Traurig, LLP, counsel for Ligand Pharmaceuticals Incorporated ("Ligand"), defendant in the above referenced matter. I respectfully submit this reply affirmation in further support of Ligand's motion to dismiss the Complaint, dated March 4, 2008 (the "Complaint") pursuant to Fed. R. Civ. P. 12(b)(2) and 12(b)(3) of the Rules of Civil Procedure and under 28 U.S.C. § 1391 to dismiss the complaint of Plaintiff The Rockefeller University ("Rockefeller"), for lack of personal jurisdiction over Ligand or improper venue. In the alternative, Ligand moves to transfer this case to the Southern District of California under 28 U.S.C. § 1404(a).

1. Attached to this Affirmation as Exhibit L is the Declaration of Alan Kessler, Esq., an associate employed by the law firm of Knobbe Martens Olsen & Bear, LLP, acting as of counsel to Ligand in connection with the above captioned matter, which in turn, attaches a series of documents for consideration in connection with Ligand's motion to dismiss.

WHEREFORE, Ligand Pharmaceuticals Inc. respectfully requests that this case be dismissed for lack of personal jurisdiction or improper venue or, in the alternative, that the case be transferred to the Southern District of California.

Dated: New York, New York
April 17, 2008

/s/
SIMON MILLER

EXHIBIT L

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

THE ROCKEFELLER UNIVERSITY, a
New York not-for-profit corporation,

Case No. 08 cv 2755-KPC-HP

Plaintiff,

v.

LIGAND PHARMACEUTICALS
INCORPORATED, a Delaware corporation,

Defendant.

DECLARATION OF ALAN KESSLER

I, Alan Kessler, declare as follows:

1. I am employed by Knobbe Martens Olson & Bear LLP ("Knobbe Martens") of San Diego California as an Associate. I have been employed by Knobbe for the past six months.

2. Exhibit M to the reply in support of the motion to dismiss or transfer, to which I understand this declaration is attached, is a true and correct copy of a string of emails between attorneys at Knobbe Martens and counsel for Plaintiff as they are archived on the computer servers at Knobbe Martens.

3. I caused staff at Knobbe Martens to search for and download public documents relating to the finances of Rockefeller University, including the most recent available IRS form 990.

4. Exhibit N is a true and correct copy of the 2004 IRS form 990 for Rockefeller University that was found during the above-mentioned search.

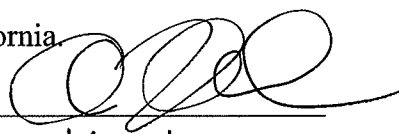
5. Exhibit O is a true and correct copy of Ligand's February 20, 2008 Press Release that I downloaded from <http://investors.ligand.com/releasedetail.cfm?ReleaseID=295237>.

6. Exhibit P is a true and correct copy of a 10-K filing made by Ligand to the SEC, which is dated March 5, 2008.

7. Exhibit R is a true and correct of a selection of pages from an agreement between Ligand Pharmaceuticals and SmithKline Beecham Corporation, which is dated 29 December 1994, as the agreement has been preserved in the files at Knobbe Martens.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on April 16, 2008 in San Diego, California.


Name: Alan Kessler
Alan Kessler

5149096
041408

EXHIBIT M

From: Darrell.Olson
Sent: Thursday, March 06, 2008 4:58 PM
To: 'Hakim, Anat'
Cc: 'Berkman, Charles'; Gregg.Anderson; Joseph.Reisman
Subject: RE: Ligand - Rockefeller

Anat,

This will state Ligand's position regarding the service of the San Diego complaint:

Ligand's position is that the parties had an agreement regarding service. This agreement was that both sides would accept service of their respective complaints by FED EX delivery to be sent on the 4th. The expectation was that delivery would be effected by FED EX on the 5th. Both sides provided FED EX with their complaints on the 4th with instructions for delivery on the 5th. The fact that FED EX had unforeseeable problems and did not serve Rockefeller until the 6th was not Ligand's fault and should not be held against Ligand. Moreover, we note that, in addition, we emailed you a copy of the complaint on the 4th and advised you of the FED EX problem on the 5th. This is to inform you that Ligand position's is that Rockefeller is deemed served by agreement on the 5th. You need not respond further on this issue as you have already stated your position that service was effected on the 6th.

Regards,

Darrell Olson

From: Hakim, Anat [mailto:AHakim@foley.com]
Sent: Thursday, March 06, 2008 11:19 AM
To: Darrell.Olson
Cc: Joseph.Reisman; nancykoch12@yahoo.com
Subject: Ligand - Rockefeller

Darrell,

Earlier today, Rockefeller University received a Fed Ex package from Luz Wright of your San Diego office, containing the Summons and Complaint filed by Ligand on March 4, 2008 in the U.S. District Court for the Southern District of California (Case No. 08-CV-401 BEN (WMc)), exhibits A-O, the Civil Cover Sheet and the Notice of Party with Financial Interest form. The Fed Ex package also contained a n Acceptance of Service of Process form, which asked the University to state that it was accepting service as of March 5, 2008.

Per my email last night to Joe Reisman (see below), the parties mutually agreed to accept service by Federal Express but there was no agreement regarding the date on which service would be effective. Since the University received Ligand's Summons and Complaint by Federal Express today (March 6), the University agrees to accept service of process as of today, March 6, 2008. Please provide a revised Acceptance of Service of Process form, with the corrected date, and the University will sign and return that form to you.

Best,

Anat

From: Hakim, Anat
Sent: Wednesday, March 05, 2008 9:31 PM
To: 'JReisman@kmob.com'
Cc: 'nancykoch12@yahoo.com'
Subject: Ligand - Rockefeller
Importance: High

Joe,

I am responding to two voicemails that were left for me two minutes apart late this afternoon by someone in your office (I believe the individual's name was Ollie Versailles?) stating that I should expect to receive by Federal Express tomorrow a copy of the complaint Ligand recently filed against Rockefeller in the Southern District of California. In addition, Mr. Versailles asked that I confirm that the parties had agreed that service of process is effective today.

The agreement between Nancy Koch and Charles Berkman was that each party would accept service by the other by Federal Express. There was no agreement regarding when service would be effective. This was confirmed by Mr. Berkman in his March 4, 2008 email to Harriet Raab, which is copied below.

Rockefeller served Ligand's registered agent in New York yesterday, March 4, 2008. To date, I am unaware that Ligand has served Rockefeller.

Best,

Anat

From: Berkman, Charles [mailto:CBerkman@ligand.com]
Sent: Tuesday, March 04, 2008 12:39 PM
To: Harriet Rabb
Cc: 'Nancy Koch'; Higgins, John L.
Subject: Ligand - Rockefeller
Importance: High

Dear Harriet,

Please see the attached. I just spoke to Nancy and understand that Rockefeller filed suit in New York this morning. We agreed that we would each accept service by Fed-Ex.

Please send me a copy of the complaint as soon as possible this morning or let me know if you will not do so. We would like to review it so we can update our disclosures with the SEC.

Regards, Charles

Charles S. Berkman
Vice President, General Counsel and Secretary
Ligand Pharmaceuticals, Inc.
10275 Science Center Drive
San Diego, California 92121
voice: (858) 550-7835
fax: (858) 550-7272

NOTICE:

The information contained in this electronic message is confidential and is only for the use of the intended recipient(s). It may also be privileged or otherwise protected by law. If the reader of this message is not the intended recipient, you are hereby notified that any use, dissemination, distribution or copy of this communication is strictly prohibited. If this communication has been received in error, please notify the sender immediately by telephone.

The preceding email message may be confidential or protected by the attorney-client privilege. It is not intended for transmission to, or receipt by, any unauthorized persons. If you have received this message in error, please (i) do not read it, (ii) reply to the sender that you received the message in error, and (iii)

erase or destroy the message. Legal advice contained in the preceding message is solely for the benefit of the Foley & Lardner LLP client(s) represented by the Firm in the particular matter that is the subject of this message, and may not be relied upon by any other party.

Internal Revenue Service regulations require that certain types of written advice include a disclaimer. To the extent the preceding message contains advice relating to a Federal tax issue, unless expressly stated otherwise the advice is not intended or written to be used, and it cannot be used by the recipient or any other taxpayer, for the purpose of avoiding Federal tax penalties, and was not written to support the promotion or marketing of any transaction or matter discussed herein.

The preceding email message may be confidential or protected by the attorney-client privilege. It is not intended for transmission to, or receipt by, any unauthorized persons. If you have received this message in error, please (i) do not read it, (ii) reply to the sender that you received the message in error, and (iii) erase or destroy the message. Legal advice contained in the preceding message is solely for the benefit of the Foley & Lardner LLP client(s) represented by the Firm in the particular matter that is the subject of this message, and may not be relied upon by any other party.

Internal Revenue Service regulations require that certain types of written advice include a disclaimer. To the extent the preceding message contains advice relating to a Federal tax issue, unless expressly stated otherwise the advice is not intended or written to be used, and it cannot be used by the recipient or any other taxpayer, for the purpose of avoiding Federal tax penalties, and was not written to support the promotion or marketing of any transaction or matter discussed herein.

EXHIBIT N

Form **990****Return of Organization Exempt From Income Tax**

OMB No. 1545-0047

2004Department of the Treasury
Internal Revenue Service

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except black lung benefit trust or private foundation)

▶ The organization may have to use a copy of this return to satisfy state reporting requirements

Open to Public
Inspection

A For the 2004 calendar year, or tax year beginning JUL 1 2004 and ending JUN 30 2005

B Check if applicable:
☐ Address change
☐ Name change
☐ Initial return
☐ Final return
☐ Amended return
☐ Application pending

C Name of organization
THE ROCKEFELLER UNIVERSITY
 Number and street (or P.O. box if mail is not delivered to street address) Room/suite
1230 YORK AVENUE
 City or town, state or country, and ZIP + 4
NEW YORK, NY 10021-6399

D Employer identification number
13-1624158

E Telephone number
212-327-8704

F Accounting method: ☐ Cash ☒ Accrual
☐ Other (specify):

G Website: www.rockefeller.edu

J Organization type (check only one): ☒ 501(c)(3) (insert no.) ☐ 4947(a)(1) or ☐ 527

K Check here ☐ if the organization's gross receipts are normally not more than \$25,000. The organization need not file a return with the IRS, but if the organization received a Form 990 Package in the mail, it should file a return without financial data. Some states require a complete return.

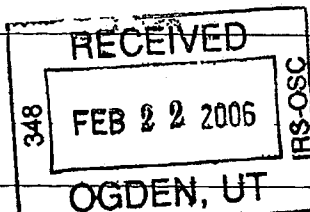
H and I are not applicable to section 527 organizations
H(a) Is this a group return for affiliates? ☐ Yes ☒ No
H(b) If "Yes," enter number of affiliates:
H(c) Are all affiliates included? N/A ☐ Yes ☐ No
H(d) Is this a separate return filed by an organization covered by a group ruling? ☐ Yes ☒ No
I Group Exemption Number:

L Gross receipts: Add lines 6b, 8b, 9b, and 10b to line 12 827,703,651

M Check ☐ if the organization is not required to attach Sch. B (Form 990, 990-EZ, or 990-PF).

Part I Revenue, Expenses, and Changes in Net Assets or Fund Balances

1	Contributions, gifts, grants, and similar amounts received:		
a	Direct public support	1a	163,693,994
b	Indirect public support	1b	
c	Government contributions (grants)	1c	86,052,944
d	Total (add lines 1a through 1c) (cash \$ <u>130,915,870</u> , noncash \$ <u>118,831,068</u>)	1d	249,746,938
2	Program service revenue including government fees and contracts (from Part VII, line 93)	2	25,519,951
3	Membership dues and assessments	3	
4	Interest on savings and temporary cash investments	4	949,924
5	Dividends and interest from securities	5	2,777,292
6 a	Gross rents See Statement 1	6a	5,473,040
b	Less: rental expenses	6b	
c	Net rental income or (loss) (subtract line 6b from line 6a)	6c	5,473,040
7	Other investment income (describe: <u>Mineral Royalties</u>)	7	135,417
8 a	Gross amount from sales of assets other than inventory	(A) Securities 8a	
		(B) Other 8b	
b	Less: cost or other basis and sales expenses	8b	
c	Gain or (loss) (attach schedule)	8c	
d	Net gain or (loss) (combine line 8c, columns (A) and (B)) Stmt 2	8d	125,890,623
9	Special events and activities (attach schedule). If any amount is from gaming, check here <input type="checkbox"/>		
a	Gross revenue (not including \$ <u> </u> of contributions reported on line 1a)	9a	
b	Less: direct expenses other than fundraising expenses	9b	
c	Net income or (loss) from special events (subtract line 9b from line 9a)	9c	
10 a	Gross sales of inventory, less returns and allowances	10a	138,382
b	Less: cost of goods sold	10b	
c	Gross profit or (loss) from sales of inventory (attach schedule) (subtract line 10b from line 10a) Stmt 3	10c	138,382
11	Other revenue (from Part VII, line 103)	11	3,116,106
12	Total revenue (add lines 1d, 2, 3, 4, 5, 6c, 7, 8d, 9c, 10c, and 11)	12	413,747,673
13	Program services (from line 44, column (B))	13	245,505,739
14	Management and general (from line 44, column (C))	14	21,511,326
15	Fundraising (from line 44, column (D))	15	4,121,000
16	Payments to affiliates (attach schedule)	16	
17	Total expenses (add lines 13 and 14, column (A))	17	271,138,065
18	Excess or (deficit) for the year (subtract line 17 from line 12)	18	142,609,608
19	Net assets or fund balances at beginning of year (from line 73, column (A))	19	1,790,071,439
20	Other changes in net assets or fund balances (attach explanation) See Statement 4	20	76,977,184
21	Net assets or fund balances at end of year (combine lines 18, 19, and 20)	21	2,009,658,231

423001
01-13-05

LHA For Privacy Act and Paperwork Reduction Act Notice, see the separate instructions

Form 990 (2004)

Form 990 (2004)

THE ROCKEFELLER UNIVERSITY

13-1624158

Page 3

Part IV Balance Sheets**Note** Where required, attached schedules and amounts within the description column should be for end-of-year amounts only

		(A) Beginning of year		(B) End of year
Assets	45 Cash - non-interest-bearing	2,111,864.	45	35,349.
	46 Savings and temporary cash investments	52,445,468.	46	30,144,156.
	47 a Accounts receivable	47a 5,442,280.		
	b Less: allowance for doubtful accounts	47b	47c	5,442,280.
	48 a Pledges receivable	48a 164,205,482.		
	b Less: allowance for doubtful accounts	48b 2,500,000.	48c	161,705,482.
	49 Grants receivable	7,250,844.	49	9,900,611.
	50 Receivables from officers, directors, trustees, and key employees Stmt 15	1,566,165.	50	1,632,721.
	51 a Other notes and loans receivable Stmt 16	51a 14,030,943.		
	b Less: allowance for doubtful accounts	51b	51c	14,030,943.
	52 Inventories for sale or use	519,149.	52	596,238.
	53 Prepaid expenses and deferred charges	2,637,271.	53	2,768,828.
	54 Investments - securities Stmt 6 Stmt 9 <input type="checkbox"/> Cost <input checked="" type="checkbox"/> FMV	1,153,495,446.	54	1,294,876,416.
	55 a Investments - land, buildings, and equipment: basis	55a		
	b Less: accumulated depreciation	55b	55c	
56 Investments - other See Statement 7	300,310,905.	56	325,924,341.	
57 a Land, buildings, and equipment: basis	57a 690,462,165.			
b Less: accumulated depreciation	57b 229,103,161.	57c	461,359,004.	
58 Other assets (describe <input checked="" type="checkbox"/> Other Assets - Statement 17)	29,353,326.	58	61,222,838.	
59 Total assets (add lines 45 through 58) (must equal line 74)	2,100,953,336.	59	2,369,639,207.	
Liabilities	60 Accounts payable and accrued expenses	21,004,486.	60	25,941,747.
	61 Grants payable		61	
	62 Deferred revenue	3,371,689.	62	3,556,943.
	63 Loans from officers, directors, trustees, and key employees		63	
	64 a Tax-exempt bond liabilities Stmt 18	237,482,893.	64a	296,674,281.
	b Mortgages and other notes payable		64b	
	65 Other liabilities (describe <input checked="" type="checkbox"/> See Statement 8)	49,022,829.	65	33,808,005.
66 Total liabilities (add lines 60 through 65)	310,881,897.	66	359,980,976.	
Net Assets or Fund Balances	Organizations that follow SFAS 117, check here <input checked="" type="checkbox"/> and complete lines 67 through 69 and lines 73 and 74			
	67 Unrestricted	1,384,727,861.	67	1,460,965,965.
	68 Temporarily restricted	233,156,664.	68	362,440,638.
	69 Permanently restricted	172,186,914.	69	186,251,628.
	Organizations that do not follow SFAS 117, check here <input type="checkbox"/> and complete lines 70 through 74			
	70 Capital stock, trust principal, or current funds		70	
	71 Paid-in or capital surplus, or land, building, and equipment fund		71	
	72 Retained earnings, endowment, accumulated income, or other funds		72	
	73 Total net assets or fund balances (add lines 67 through 69 or lines 70 through 72; column (A) must equal line 19; column (B) must equal line 21)	1,790,071,439.	73	2,009,658,231.
	74 Total liabilities and net assets / fund balances (add lines 66 and 73)	2,100,953,336.	74	2,369,639,207.

Form 990 is available for public inspection and, for some people, serves as the primary or sole source of information about a particular organization. How the public perceives an organization in such cases may be determined by the information presented on its return. Therefore, please make sure the return is complete and accurate and fully describes, in Part III, the organization's programs and accomplishments.

EXHIBIT O



Ligand Pharmaceuticals Announces Fourth Quarter and Full Year 2007 Financial Results

Conference call begins at 4:30 p.m. Eastern time today

SAN DIEGO, Feb 20, 2008 (BUSINESS WIRE) -- Ligand Pharmaceuticals Incorporated (NASDAQ:LGND) today announced financial results for the three and 12 months ended December 31, 2007, and reviewed business highlights of the fourth quarter of 2007 and early 2008.

Financial Results

The Company sold its commercial oncology products in October 2006 and sold its AVINZA(R) product line in February 2007. The results of operations related to the oncology products and AVINZA have been reflected as discontinued operations for all reporting periods discussed below.

For the fourth quarter of 2007, total revenues from continuing operations were \$5.8 million, compared with no revenues in the fourth quarter of 2006. Total revenues from continuing operations in 2007 were \$12.9 million, compared with total revenues of \$4.0 million in 2006.

Operating expenses from continuing operations in the fourth quarter of 2007 were \$14.3 million, compared with \$26.7 million in the fourth quarter of 2006. Operating expenses from continuing operations in 2007 were \$75.0 million, compared with \$85.5 million in 2006.

Net income in the fourth quarter of 2007 was \$5.9 million, or \$0.06 per share, compared with net income of \$141.4 million, or \$1.61 per share, in the comparable 2006 quarter. Loss from continuing operations in the fourth quarter of 2007 was \$5.3 million, or \$0.06 per share, compared with a loss from continuing operations of \$3.5 million, or \$0.04 per share, in the comparable 2006 quarter. Income from discontinued operations in the fourth quarter of 2007 was \$11.3 million, or \$0.12 per share, compared with income from discontinued operations of \$144.9 million, or \$1.65 per share, in the comparable 2006 quarter.

Net income in 2007 was \$281.7 million, or \$2.87 per share, compared with a net loss of \$31.7 million, or \$0.39 per share, in 2006. Loss from continuing operations in 2007 was \$34.8 million, or \$0.35 per share, compared with a loss from continuing operations of \$56.6 million, or \$0.70 per share, in 2006. Income from discontinued operations in 2007 was \$316.4 million, or \$3.22 per share, compared with income from discontinued operations of \$24.8 million, or \$0.31 per share, in 2006.

As of December 31, 2007, Ligand had cash, cash equivalents, short-term investments and restricted investments of approximately \$96 million. In addition, as of December 31, 2007 there was approximately \$10 million of cash held in a trust account to support potential indemnifiable claims on behalf of certain current and former members of Ligand's Board of Directors. The Company also expects to receive \$7.5 million in the first quarter of 2008, which is currently held in escrow to support potential claims by purchasers of Ligand's commercial products. As of February 20, 2008, Ligand had repurchased 6.5 million shares of its common stock for a total of \$41.2 million, and had approximately 95.0 million shares of common stock outstanding.

"2007 was a transitional year as we took necessary steps to restructure Ligand and realign the business in order to create a stronger platform for long-term growth," said John L. Higgins, President and Chief Executive Officer. "By the end of 2008, we may see FDA action on three Ligand-alliance products including: PROMACTA(TM) (eltrombopag) for the treatment of short-term ITP from GlaxoSmithKline (GSK), VIVIAN(TM) (bazedoxifene) for the prevention and treatment of osteoporosis from Wyeth and Pfizer's FABL(YN)(R) (lasofoxi(fene)) for osteoporosis treatment. In addition, with the positive results from Ligand's TPO program, we also expect to initiate multiple clinical studies with LGD-4665 this year. Importantly, our cost structure now reflects a product development strategy that is focused on our most promising pipeline opportunities."

Fourth Quarter 2007 and Early 2008 Highlights

Business highlights of the fourth quarter of 2007 and early 2008 include the following:

-- In January 2008, Ligand was awarded U.S. patent (No. 7,314,887) for LGD-4665 titled "Thrombopoietin Activity Modulating Compounds and Methods." Ligand was also ranked as one of the Top Industry Innovators by the Pharmaceuticals Patent

Scorecard.

-- In December 2007, Ligand earned a \$1 million milestone payment from GlaxoSmithKline as a result of GSK's submission of a New Drug Application (NDA) for PROMACTA(TM) (eltrombopag).

-- In October 2007, The Journal of Medicinal Chemistry published an article on a SARM molecule authored by a team of Ligand scientists, titled "LGD-2941 Shows Promise in Treating Muscle and Bone Loss." The American Chemical Society commented on the article on its website and issued a press release.

-- In September 2007, Ligand earned a milestone payment of \$250,000 from Wyeth as a result of Wyeth's submission of a Market Authorization Application (MAA) to the European Medicines Agency (EMA) for approval to market bazedoxifene for the prevention and treatment of osteoporosis.

2008 Financial Outlook

In 2008, Ligand expects to receive approximately \$20 million in royalty revenue from King Pharmaceuticals for sales of AVINZA and potential milestone payments from existing corporate partners. The Company anticipates the total operating expenses in 2008 will be between \$36 to \$39 million including stock-based compensation and \$2 million of gain on sale leaseback. In addition to these expenses, Ligand expects to incur a \$4.1 million non-cash charge in the first quarter of 2008 relating to a one-time expense for lease costs as a result of vacating one of Ligand's buildings.

Key Program Updates

LGD-4665 - TPO Mimetic: Ligand completed and announced results for Phase I studies with LGD-4665. The Phase I clinical trial evaluated three dosing regimens of LGD-4665, including single doses, multiple daily doses for 14 days and Day 1 loading doses followed by daily doses for 13 days. The drug was safe and well tolerated, and statistically significant platelet increases were observed in both single and multiple daily dose regimens. During 2008, the Company expects to initiate clinical studies in ITP in the first quarter, myelodysplastic syndrome (MDS) in the second quarter and hepatitis C in the fourth quarter.

Selective Androgen Receptor Modulators (SARM): Ligand is conducting preclinical studies on numerous potential SARM candidates. The Company anticipates filing an IND for its lead SARM LGD-4033 by the end of 2008.

EPO Mimetic: Ligand is conducting drug discovery and research studies for an oral erythropoietin (EPO) mimetic. EPO and TPO act on hematopoietic stem cells to guide development of blood cells to form erythrocytes or platelets. EPO and TPO produce lineage specific effects by acting through similar receptors. Ligand believes that oral EPO mimetics will provide new therapeutic options to patients with anemia of chronic disease as well as existing ESA (erythropoietin stimulating agent)-treated patients who may have chronic renal disease or cancer.

GlaxoSmithKline - TPO Mimetic, Eltrombopag: Ligand's partner GlaxoSmithKline submitted an NDA for PROMACTA(TM) (eltrombopag) for the treatment of short-term immune thrombocytopenic purpura (ITP) in the fourth quarter of 2007. In addition, two Phase III trials were initiated by GSK in the fourth quarter of 2007 for hepatitis C; a clinical study is ongoing in sarcoma patients receiving chemotherapy.

Wyeth - SERM (selective estrogen receptor modulator), Bazedoxifene:

VIVIAN(TM) - In December 2007, Wyeth received a second approvable letter from the FDA for VIVIAN(TM) (bazedoxifene), a selective estrogen receptor modulator, for the prevention of postmenopausal osteoporosis. In January 2008, Wyeth reported that the FDA expects to convene an Advisory Committee meeting in July 2008 to review both the treatment and prevention of osteoporosis indications for VIVIAN(TM).

APRELA(TM) - Wyeth announced in January 2008 that it plans to meet with the FDA in February 2008 to discuss product formulation, bioequivalence and clinical study efforts to support the planned NDA filing. Wyeth projects APRELA(TM) NDA filing no earlier than the fourth quarter of 2008.

Pfizer - SERM, Lasofoxifene: Ligand's partner Pfizer submitted an NDA for FABLYN(R) (lasofoxifene) in the fourth quarter of 2007. Pfizer has included the three-year interim data from the Postmenopausal Evaluation And Risk-reduction with Lasofoxifene (PEARL) study to support the current NDA for lasofoxifene in the treatment of osteoporosis.

Financial Updates

NOLs - As of December 31, 2007, Ligand estimated it has net operating loss carry forwards (NOLs) of approximately \$240 million for federal tax purposes. This is higher than previously reported NOLs of \$100 million due to the inclusion of NOLs from previously acquired companies as well as a reflection of the calculated tax gain from the sale of AVINZA.

Dividend - As previously announced, on March 20, 2007 the Board of Directors declared a special one-time cash dividend of \$2.50 per share of common stock to stockholders of record on April 5, 2007. The distribution was completed on April 19, 2007. The distribution has been deemed a tax-free return of capital to most stockholders to the extent of each stockholder's tax basis in his, her or its shares. Because individual tax circumstances of stockholders vary, stockholders should consult their own tax advisors regarding the tax consequences to them of the distribution.

Conference Call

Ligand management will host a conference call today beginning at 4:30 p.m. Eastern time (1:30 p.m. Pacific time) to discuss this announcement and answer questions. To participate via telephone please dial (877) 356-5578 from the U.S. or (706) 679-0565 from outside the U.S.

A replay of the call will be available until March 20, 2008 at 5:30 p.m. Eastern time by dialing (800) 642-1687 from the U.S. or (706) 645-9291 from outside the U.S., and entering passcode 33354833. Individual investors can access the live and archived Webcast through Ligand's web site at www.ligand.com.

About Ligand Pharmaceuticals

Ligand discovers and develops new drugs that address critical unmet medical needs of patients in the areas of thrombocytopenia, cancer, hepatitis C, hormone-related diseases, osteoporosis and inflammatory diseases. Ligand's proprietary drug discovery and development programs are based on its leadership position in gene transcription technology, primarily related to intracellular receptors.

Forward-Looking Statements

This news release contains certain forward-looking statements by Ligand that involve risks and uncertainties and reflect Ligand's judgment as of the date of this release. Actual events or results may differ from Ligand's expectations. For example, we may not receive expected royalties on AVINZA(R) from King Pharmaceuticals or any other partnered products or from research and development milestones, and we may not be able to timely or successfully transform Ligand or advance any product(s) in Ligand's pipeline. In addition, there can be no assurance that Ligand will achieve its guidance for 2008, that Ligand's 2008 revenues will be driven by royalty payments related to AVINZA sales, that results of any clinical study will be timely, favorable or confirmed by later studies, that products under development by Ligand or its partners will receive regulatory approval in 2008 or later, or that there will be a market for the product(s) if successfully developed and approved. Ligand may also be unable to file an IND for its lead SARM LGD-4033 by the end of 2008. Also, Ligand may experience delays in the commencement, enrollment, completion or analysis of clinical testing for its product candidates, or significant issues regarding the adequacy of its clinical trial designs or the execution of its clinical trials, which could result in increased costs and delays, or limit Ligand's ability to obtain regulatory approval. Further, unexpected adverse side effects or inadequate therapeutic efficacy of Ligand's product(s) could delay or prevent regulatory approval or commercialization. Ligand may also have indemnification obligations to King Pharmaceuticals or Eisai in connection with the sales of the AVINZA and oncology product lines. Further, Ligand may not be able to complete its reductions in workforce on any particular or expected timeframe, Ligand may not realize significant operating savings due to its restructuring, Ligand may not be able to successfully or timely complete a transformation of the company, its early stage programs or any specific business or research initiative(s). In addition, Ligand may not be able to successfully implement its strategy, and continue the development of its proprietary programs. The failure to meet expectations with respect to any of the foregoing matters may reduce Ligand's stock price. Additional information concerning these and other risk factors affecting Ligand's business can be found in prior press releases available via www.ligand.com as well as in Ligand's public periodic filings with the Securities and Exchange Commission at www.sec.gov. Ligand disclaims any intent or obligation to update these forward-looking statements beyond the date of this release. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

LIGAND PHARMACEUTICALS INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share data)

	Three Months Ended December 31,		Year Ended December 31,	
	2007	2006 (a)	2007	2006 (a)
Revenues:	(unaudited)			
Royalties	\$ 4,770	\$ --	\$ 11,409	\$ --
Collaborative research and				

EXHIBIT P

EDGAROnline

LIGAND PHARMACEUTICALS INC

FORM 10-K (Annual Report)

Filed 03/05/08 for the Period Ending 12/31/07

Address	10275 SCIENCE CENTER DRIVE SAN DIEGO, CA 92121-1117
Telephone	8585507500
CIK	0000886163
Symbol	LGND
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Drugs
Sector	Technology
Fiscal Year	12/31

Powered By **EDGAR**Online
<http://www.edgar-online.com>

© Copyright 2008, EDGAR Online, Inc. All Rights Reserved.
Distribution and use of this document restricted under EDGAR Online, Inc. Terms of Use.

Table of Contents

rules, we could be delisted from trading on the NASDAQ Global Market, or Nasdaq, and thereafter trading in our common stock, if any, would be conducted through the over-the-counter market or on the Electronic Bulletin Board of the NASD. As a consequence of such delisting, an investor would likely find it more difficult to dispose of, or to obtain quotations as to the price of, our common stock. Delisting of our common stock could also result in lower prices per share of our common stock than would otherwise prevail.

In March 2007, we announced that our Board of Directors authorized a stock repurchase program under Rule 10b-18 of the Securities Exchange Act of 1934, as amended, of up to \$100 million of shares of our common stock in the open market and negotiated purchases over a period of 12 months. During 2007, we repurchased 6.2 million shares of our common stock in open market transactions at varying prices for an aggregate purchase price of \$39.6 million. The existence of such a program may contribute to the volatility of the price of our common stock and impact the liquidity of our common stock.

Our product development involves a number of uncertainties, and we may never generate sufficient collaborative payments and royalties from the development of products to become profitable.

We were founded in 1987. We have incurred significant losses since our inception. As of December 31, 2007, our accumulated deficit was \$581.5 million.

Most of our products in development will require extensive additional development, including preclinical testing and human studies, as well as regulatory approvals, before they can be marketed. We cannot predict if or when any of the products we are developing or those being developed with our partners will be approved for marketing. There are many reasons why we or our collaborative partners may fail in our efforts to develop our potential products, including the possibility that: preclinical testing or human studies may show that our potential products are ineffective or cause harmful side effects; the products may fail to receive necessary regulatory approvals from the FDA or foreign authorities in a timely manner, or at all; the products, if approved, may not be produced in commercial quantities or at reasonable costs; the products, if approved, may not achieve commercial acceptance; regulatory or governmental authorities may apply restrictions to our products, which could adversely affect their commercial success; or the proprietary rights of other parties may prevent us or our partners from marketing the products.

Any product development failures for these or other reasons, whether with our products or our partners' products, may reduce our expected revenues, profits, and stock price.

The past restatement of our consolidated financial statements increased the possibility of legal or administrative proceedings. Any future material weaknesses or deficiencies in our internal control over financial reporting could harm stockholder and business confidence on our financial reporting, our ability to obtain financing and other aspects of our business.

We determined that our consolidated financial statements for the years ended December 31, 2002 and 2003, and for the first three quarters of 2004, as described in more detail in our 2004 Annual Report on Form 10-K, should be restated. As a result of these events, we have become subject to a number of additional risks and uncertainties. We expect to continue to incur unanticipated accounting and legal costs as noted below. In addition, the SEC has instituted a formal investigation into our restated consolidated financial statements identified above. This investigation will likely divert more of our management's time and attention and cause us to incur substantial costs. Such investigations can also lead to fines or injunctions or orders with respect to future activities, as well as further substantial costs and diversion of management time and attention.

While no material weaknesses were identified as of December 31, 2007, we cannot assure you that material weaknesses will not be identified in future periods. The existence of one or more material weakness or significant deficiency could result in errors in our consolidated financial statements. Substantial costs and resources may be required to rectify any internal control deficiencies. If we fail to achieve and maintain the adequacy of our internal controls in accordance with applicable standards, we may be unable to conclude on an ongoing basis that

EXHIBIT Q

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK

THE ROCKEFELLER UNIVERSITY, a
New York not-for-profit corporation,

Case No. 08 cv 2755-KPC-HP

Plaintiff,

v.

LIGAND PHARMACEUTICALS
INCORPORATED, a Delaware corporation,

Defendant.

SUPPLEMENTAL DECLARATION OF AUDREY WARFIELD-GRAHAM

I Audrey Warfield-Graham declare as follows:

1. I am the same Audrey Warfield-Graham who signed a declaration in the above entitled matter dated March 19, 2008.
2. I have reviewed Exhibit H, a listing of scientific personnel employed or formerly employed by Ligand Pharmaceuticals, Inc. ("Ligand"), which was referenced in my prior declaration.
3. As previously stated, my job responsibilities include maintaining accurate records of current and former employees of Ligand, including the person's last known address.
4. I have made a further review of Exhibit H and Ligand's employee files for purposes of identifying those persons listed in Exhibit H who are no longer employees of Ligand.
5. In Exhibit H, asterisks or stars were placed by some names, but these markings had no purpose.
6. Attached hereto as Exhibit H-1 is an amended Exhibit H. The amended Exhibit H-1 includes stars or asterisks by names of all persons listed in Exhibit H who are no longer employed by Ligand.

7. I have further confirmed that each of the names associated with an asterisks or star in Exhibit H-1 is a correct and accurate indication of persons listed in Exhibit H who are no longer employed by Ligand.


8. I have also checked Ligand's records for the last known address of Larry Respass and David Robinson.

9. Dr. Respass was General Counsel for Ligand in 1992 and Mr. Robinson was Chief Executive Officer that same year.

10. Both Dr. Respass and Mr. Robinson last known addresses are in or near San Diego, California.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on April 16, 2008 in San Diego, California.

Name: 
Audrey Warfield-Graham

The Rockefeller University v. Ligand Pharmaceuticals
Ligand Witnesses with Scientific Role in Development of Eltrombopag and LGD-4665

Potential Witness	Last Known Location	Ligand Title	Anticipated Testimony
Abramian, Donara S *	ROCKVILLE, MD 20850	Assistant Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Apuy, Julius *	SAN DIEGO, CA 92139	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Cahiwat, Joseph R. *	LA VERNE, CA 91750	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Chen, Jyun-Hua *	SAN DIEGO, CA 92122	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Dalgard, Jackline E. *	DEL MAR, CA 92014	Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Dana, Sharon L. *	CARLSBAD, CA 92010	Research Investigator	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
de Grandpre, Louise *	SAN DIEGO, CA 92129	Staff Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Delorme, Evelyn *	SAN DIEGO, CA 92122	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Fields, Antonio *	OCEANSIDE, CA 92054	Research Assistant	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Fike, John R *	WEST LAFAYETTE, IN 47906	Assistant Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Gaylord, Natalie *	SPRING VALLEY, CA 91977	Sr. Mgr. Vivarium	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Giampa, Leslie *	EL CAJON, CA 92019	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Gillespie, Gerald A. *	SAN DIEGO, CA 92129	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Gross, Catherine E. *	SAN DIEGO, CA 92109	Sr. Research Associate	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Haslam, Jennifer A *	SAN DIEGO, CA 92124	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Hong, Mei Hua	SAN DIEGO, CA 92130	Sr. Research Investigator	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
NG, Beng (Huang, Mingli) *	SAN DIEGO, CA 92130	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Huang, Ruo *	SAN DIEGO, CA 92117	Sr. Research Associate	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Igno, Cesar *	SAN DIEGO, CA 92139	Sr. Research Associate	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Iskander, Maya *	SAN DIEGO, CA 92117	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag

5135103

4/16/2008

Potential Witness	Last Known Location	Ligand Title	Anticipated Testimony
Kallel, E. Adam *	ESCONDIDO, CA 92026	Sr. Research Investigator	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Kessler, Linda V *	POWAY, CA 92064	Staff Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Lamb, Peter *	SOUTH SAN FRANCISCO, CA 94083	Director, Transcription Research	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Lau, Thomas *	SAN DIEGO, CA 92131	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Lee, Yong-Hee	SAN DIEGO, CA 92129	Dir. Drug, Safety & Disposition	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Luo, Wen	SAN DIEGO, CA 92130	Research Investigator	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Mais, Dale E. *	VALLEY CENTER, CA 92082	Research Investigator	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Marschke, Keith	SAN DIEGO, CA 92128	Sr. Dir. Molecular Sciences	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
McNeill, Matthew H. *	SAN CLEMENTE, CA 92673	Assistant Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Meglasson, Martin	SAN DIEGO, CA 92130	VP, Discovery Research	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Miller, Stephen G. *	SAN DIEGO, CA 92130	Director, New Leads	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Miller, Todd A. *	SAN MARCOS, CA 92069	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Milocco, Lawrence H *	SOLANA BEACH, CA 92075	Asst Scientist / Proj Mgt / Mkt Res Analyst	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Negro-Vilar, Andres F. *	WASHINGTON, DC 20037	SVP, Research & Dev, CSO	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Nguyen, Bao N. *	SAN DIEGO, CA 92126	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Penuliar, Richard J. *	SAN DIEGO, CA 92120	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Phillips, Dean P. *	SAN MARCOS, CA 92069	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Rosen, Jonathan I *	SAN DIEGO, CA 92131	VP, Head, Early Discovery Res.	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665 & Eltrombopag
Rungta, Deepa	SAN DIEGO, CA 92130	Director of New Leads	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Ruppar, Daniel A. *	SAN ANTONIO, TX 78258	Assistant Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Saliba, Iris *	SAN DIEGO, CA 92129	Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665

5135103

4/16/2008

Potential Witness	Last Known Location	Ligand Title	Anticipated Testimony
Sanders, Jennifer	ENCINITAS, CA 92024	Associate Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Seidel, Martin *	SAN DIEGO, CA 92122	Associate Director, Transcription Res	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Stein, Robert B *	WILMINGTON, DE 19807	SVP, Research & CSO	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Sun, Hong	SAN DIEGO, CA 92130	Staff Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Syka, Peter	SAN DIEGO, CA 92129	Staff Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Tapley, Peter *	COLLEGEVILLE, PA 19426	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Tian, Shin-Shay *	SAN DIEGO, CA 92130	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Tyree, Curtis *	SAN DIEGO, CA 92129	Sr. Research Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of Eltrombopag
Valencia, Jorge *	CHULA VISTA, CA 91910	Sr. Research Associate	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Wardlow, Marilyn *	SAN DIEGO, CA 92123	Scientist	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665
Zhi, Lin	SAN DIEGO, CA 92130	Sr. Dir. Chemistry & Pharma Scil	Ligand Scientific Personnel Involved in the Discovery and Development of LGD-4665

5135103

4/16/2008

EXHIBIT R

RESEARCH, DEVELOPMENT AND LICENSE AGREEMENT

by and between

SMITHKLINE BEECHAM CORPORATION

and

LIGAND PHARMACEUTICALS INCORPORATED

dated

29 December 1994

sbvllagrec
02/03/05

APPENDIX A

SMITHKLINE BEECHAM CORPORATION - LIGAND PHARMACEUTICALS

**COLLABORATIVE RESEARCH AGREEMENT
IN THE FIELD OF SMALL MOLECULE CYTOKINE AGONISTS**

KEY TO ABBREVIATIONS

The following abbreviations are used in this Appendix A:

EPO	Erythropoietin
G-CSF	Granulocyte-colony stimulating factor
HTS	High Throughput Screen
TPO	Thrombopoietin
c-mpl	cellular receptor for thrombopoietin

The general goal of this collaboration is to discover small molecules that can mimic the effects of selected colony stimulating factors through the use of screens that detect the activation of the signal transduction systems utilized by these factors.

A. SPECIFIC OBJECTIVES - SUMMARY

1. Development of validated high throughput screens (HTS) for small molecule agonists of granulocyte-colony stimulating factor (G-CSF), erythropoietin (EPO), and optionally thrombopoietin (TPO).
2. Screen Smithkline Beecham compound libraries in these screens.
3. Establish validated secondary screens to confirm the activity and evaluate selectivity of primary screen positives and identification of their mechanisms of action.
4. Perform substructure searches to identify more potent analogues of primary screen positives.

stb:diag
02/03/95

A - 1

5. Optimize lead compounds.

6. Test most potent analogues *in vitro* and in animal models.

7. Characterize hematomodulatory molecules already identified by SB for their effects on the JAK/STAT pathway of interest, with special emphasis placed on determining their selectivity with respect to the STAT pathways utilized by other cytokines such as IL-4, IL-6, IFN γ and IFN α . (As outlined in section 3.6).

B. WORK TO BE PERFORMED BY LIGAND

Development of High Throughput Screens: LIGAND will develop, employ and transfer to SB validated high throughput screens (HTS). The basic elements required for the development of a HTS for each of the three cytokines is the same: (i) identification of a suitable cell line, (ii) identification of an appropriate response element, and (iii) optimization of all assay parameters for high throughput screening. Once RCC has determined that an assay is optimized and validated, high throughput screening of SB compound collections would commence at LIGAND. The HTS will also be transferred to SB for screening of additional chemical and natural PRODUCT collections.

Using the current assay configuration, an appropriate cell line for a particular HTS must contain the requisite receptor chains, as well as JAKs and STATs involved in signal transduction for the target cytokine. In addition, either high-efficiency transient transfection of the cell line must be possible, or, preferably, cell lines with the reporter stably integrated must be constructed. Furthermore, the growth and survival characteristics of the chosen cell line must be amenable to the requirements of an automated HTS. The HTS can be configured to identify agonists, partial agonists, antagonists or partial antagonists of the cellular actions or effects of the noted hematopoietic growth factors.

At the heart of the contemplated assays are the reporter plasmids that are introduced into the appropriate cell lines before treatment with test compounds. The reporter contains a cDNA encoding a reporter gene (usually firefly luciferase) as well as a promoter element capable of being regulated by the STAT transcription factor(s) complex formed after stimulation with the target cytokine. LIGAND has assembled and characterized a large library of DNA elements

sbvdiagrc
02/03/05

A - 2

related to the GAS sequences initially found to mediate IFN γ stimulation. Analysis of over 100 response elements demonstrated that different STATs activated by a variety of cytokines can bind to and activate these elements. Some of these synthetic elements show selectivity for different STAT complexes. These elements can be incorporated into reporter plasmids to provide the basis of a cytokine agonist screen.

Once a compound is scored as a positive or 'hit' in HTS, it will be rapidly retested with a full concentration response range to confirm its activity. With multiple cytokine and intracellular receptor assays now running concurrently at LIGAND, the relative activity of a given 'hit' in the various assays can be rapidly assessed to indicate the level of selectivity.

Secondary in vitro mechanistic assays: Secondary assays for assessing the compounds emerging from the HTS fall into two categories; mechanistic and biological. Mechanistic assays are aimed at determining the site of action of a compound and include receptor binding, phosphorylation of JAKs and STATs, translocation of STATs to the nucleus and DNA binding of the STAT complex. The mechanistic assays will be configured for G-CSF, EPO and, when the SB option is exercised, TPO by LIGAND, and methodology/reagents transferred to SB as needed.

C. WORK TO BE DONE BY SB

Cloning and expression of TPO: SB will provide reagents to include TPO and c-mpl transfected cell lines to LIGAND for the development of a TPO HTS screen, if such a screen is selected by SB.

Secondary in vitro biological assays: The secondary biological assays include induction of proliferation and differentiation, and modulation of endogenous genes. Several murine and human biological assays are currently in place at SB for G-CSF and EPO. Additional work will be performed at SB to establish similar assays for TPO, and to develop additional biological assays for G-CSF and EPO where necessary.

In vivo Animal Models: Animal studies leading to characterization of selected lead compounds for further preclinical or clinical development will be performed by SB.

sb\dilagene
020305

A - 3